

Serial No. 10/797,653
Amendment dated December 21, 2006
Office Action dated June 21, 2006

PATENT
Docket No. 2855/111

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IN THE CLAIMS:

Please amend the claims as follows (all claims listed):

1. – 5. (Cancelled)

6. (Currently Amended) A read head for a magnetic recording device comprising:

a substrate made of an electrically insulating material;

a conductive film disposed on said substrate;

a first insulating film disposed and planarized over said conductive film;

an under-shield disposed over said first insulating film and a portion of said
conductive film;

a second insulating film disposed over said under-shield; and

read-head circuitry disposed on said second insulating film and over said
conductive film wherein said read head includes two leads, and said read head further
comprising two resistive stripes each conductively coupling said under-shield to one of
said two leads; and

a grounding pad disposed on said second insulating film and conductively
coupled to said conductive film.

7. (Cancelled)

8. (Cancelled)

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9. (Currently Amended) The read head of claim 8 6 wherein a resistance of said resistive stripes is approximately 2 k Ω .

10. (Currently Amended) The read head of claim 8 6 wherein said resistive film is further conductively coupling said under-shield to said grounding pad and has a resistance of approximately 200 k Ω .

11. (Currently Amended) A method of fabricating a read head for a magnetic recording device, comprising:

Applying a conductive layer to top and bottom surfaces of a substrate made of an electrically insulating material;

disposing a conductive patch material on ~~[[a]]~~ the top surface of the conductive layer on said substrate made of an electrically insulating material; and

disposing read-head circuitry over a portion of said conductive patch material.

12. (Original) The method of claim 11 wherein said read-head circuitry is giant magnetoresistive circuitry, the method further comprising:

disposing an under-shield between said conductive patch material and said read-head circuitry.

13. (Original) The method of claim 12 wherein said substrate is made of alumina.

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14. (Currently Amended) A method of fabricating a read head for a magnetic recording device, comprising:

Applying a conductive layer to top and bottom surfaces of a substrate made of an electrically insulating material;

disposing a conductive patch material on ~~[[a]]~~ the top surface of the conductive layer on said ~~substrate made of an electrically insulating material;~~

disposing an under-shield over a portion of said conductive patch material; and

disposing giant magnetoresistive read-head circuitry over said under-shield.

15. (Original) The method of claim 14, further comprising:

disposing a ground pad over a portion of said conductive patch material, said ground pad being conductively coupled to said conductive patch material.

16. (Original) The method of claim 15, further comprising:

disposing an insulating layer over said under-shield;

providing at least one via through said insulating film to expose said under-shield;

disposing leads for said read-head on said insulating film; and

disposing a resistive film on said insulating film so as to conductively couple said under-shield to the leads of said read-head.

17. (Original) The method of claim 16, wherein said resistive film conductively couples said under-shield to said grounding pad.

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18. (Original) The method of claim 17, wherein said resistive film between the under-shield and the leads of the read-head is approximately 2 k Ω .

19. (Original) A method of fabricating read heads for a magnetic recording device, comprising:

disposing a conductive patch material on a wafer made of an electrically insulating material for a plurality of read heads, such that said conductive patch material for each of said read heads is conductively coupled together on a top surface of said wafer;

disposing an under-shield over a portion of said conductive patch material for each read head; and

disposing giant magnetoresistive read-head circuitry over said under-shield for each read head.

20. (Original) The method of claim 19 wherein in said disposing a conductive patch material operation, conductive material is disposed on a bottom and side surface of said wafer such that conductive material on the bottom side surface of said wafer is conductively coupled to the conductive patch material on the top surface of the wafer.

21. (Original) The method of claim 20 further comprising:

removing said conductive material from the bottom surface of said wafer except for a periphery of said bottom surface of said wafer.

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22. (Original) The method of claim 20 wherein said conductive material is only disposed at a periphery of the bottom surface of said wafer.

23. (Currently Amended) A head suspension assembly comprising:

a read head including

a substrate made of an electrically insulating material;

a conductive film disposed on said substrate;

a first insulating film disposed and planarized over said conductive film;

an under-shield disposed over said first insulating film and a portion of said conductive film;

a second insulating film disposed and planarized over said under-shield;

and

read-head circuitry disposed on said second insulating film and over said conductive film wherein said read head includes two leads, and said read head further comprising two resistive stripes each conductively coupling said under-shield to one of said two leads; and

a grounding pad disposed on said second insulating film and conductively coupled to said conductive film; and

a suspension including a conductive path coupled to said grounding pad.